

WE CLAIM:

1. A breathing assistance apparatus comprising:

nasal cannula, shaped to fit within a user's nares, and adapted to deliver said humidified gases to said user,

5 a pressurised source of gases,

transportation means adapted to, in use, be in fluid communication with said source of gases and said nasal cannula and adapted to in use convey said gases to said user,

wherein said nasal cannula includes at least one prong that is capable of high flow delivery of said humidified gases and creates a positive airway pressure in said patient's airway, said at least one prong having an angled end, such that in use, gases flowing
10 through said prong are directed to said user's nasal passages.

2. A breathing assistance apparatus according to claim 1 wherein said nasal cannula includes arms or loop to attach a head strap to said cannula.

3. A breathing assistance apparatus according to claim 2 wherein said head strap is a
15 small flexible tube.

4. A breathing assistance apparatus according to any one of claims 1 to 3 wherein said at least one prong includes a flange near or about its end.

5. A breathing assistance apparatus according to any one of claims 1 to 4 wherein said at least one prong is two prongs that are angled toward one another and are oval in shape
20 such that they substantially follow the shape and contour of human nares.

6. A breathing assistance apparatus according to claim 4 wherein said flange causes the sealing of said at least one prong in at least one nare of said user in use.

7. A breathing assistance apparatus according to claim 4 or 6 wherein said flange is a thin flexible extension that extends substantially completely around the circumference of
25 said at least one prong.

8. A breathing assistance apparatus according to any one of claims 4, 6 or 7 wherein said flange is elliptical in shape with one side of said flange extending out from said at least one prong further than the other side.

9. A breathing assistance apparatus according to any one of claims 1 to 8 wherein said
30 at least one prong includes a flange, recessed area and shaped end where the recessed area is disposed between said flange and said shaped end and in use said flange extends into and seals within a user's nares.

10. A breathing assistance apparatus according to claim 9 wherein said shaped end becomes progressively thinner in cross-section towards its tip.

11. A breathing assistance apparatus comprising:
nasal cannula, shaped to fit within a user's nares,
a pressurised source of gases,
transportation means adapted to, in use, be in fluid communication with said source
5 of gases and said nasal cannula and adapted to in use convey said gases to said user,
wherein said nasal cannula are adapted to deliver said humidified gases to said user,
said nasal cannula including at least one prong allowing high flow delivery of said
humidified gases and creating positive airway pressure in said patient's airway, said at
least one prong having an end that is flared outwardly.
- 10 12. A breathing assistance apparatus according to claim 11 wherein said flared end of
said at least one prong at least partially seals within said user's nares in use.
13. A breathing assistance apparatus according to claim 10 or 11 wherein said nasal
cannula has two nasal prongs.
14. A breathing assistance apparatus according to claim 13 wherein said prongs are
15 oval and shaped to follow the contours of human nares.
15. A breathing assistance apparatus according to claims 13 or 14 wherein said prongs
are angled toward one another to prevent dislodgement from said user's nares and assist in
flow of gases into the user's nasal passages.
16. A breathing assistance apparatus according to any one of claims 13 to 15 wherein
20 said prongs each have a step formed in them such that in use the sides of said prongs abut
the user's nasal septum so as to prevent said prongs from dislodging from said user's nares.
17. A breathing assistance apparatus according to claim 16 wherein each of said prongs
include a protrusion formed opposite said step that assists in correct orientation of said
prongs within said user's nares.
- 25 18. A breathing assistance apparatus according to any one of claims 10 to 17 wherein
said nasal cannula includes a body that has a plurality of apertures that act as a bias flow
outlet vent for gases exhaled by said user.
19. A breathing assistance apparatus according to any one of claims 10 to 18 wherein
said nasal cannula is connected to said transportation means by way of a ball and socket
30 joint.
20. A breathing assistance apparatus according to any one of claims 10 to 8 that further
19 includes humidification means adapted to, in use, be in fluid communication with said
source of gases and said transportation means and adapted to in use humidify said gases,

21. A breathing assistance apparatus as herein described with reference to the accompanying figures.